



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Inspection Report

Supervisor 4

Minerals Regulatory Program

Date of Report: 04/04/2008

Mine Name: Towers Sand and Gravel
Operator Name: C. E. Butters Realty and Construction

Permit number: S0570004
Inspection Date: April 9, 2008
Time: about 11:30 AM to 1:30 PM

Inspector(s): Paul Baker
Other Participants: Bill Howell (Butters Construction)
Mine Status: Active

Weather: Mostly cloudy, 40-50s, blustery

Elements of Inspection

	Evaluated	Comment	Enforcement
1. Permits, Revisions, Transfer, Bonds	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Public Safety (shafts, adits, trash, signs, highwalls)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Protection of Drainages / Erosion Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Deleterious Material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Roads (maintenance, surfacing, dust control, safety)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Concurrent Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Backfilling/Grading (trenches, pits, roads, highwalls, shafts, drill holes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Water Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Soils	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Revegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Other	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Purpose of Inspection:

This was a routine inspection.

Inspection Summary:

1. Permits, Revisions, Transfer, Bonds

On November 29, 2006, the operator requested that the site be released on the basis that it is a sand and gravel operation, but in a letter dated January 17, 2007, the Division denied this request. The operator is mining bedrock, and there is also an area from which clay had been extracted. The letter said the operation may have exceeded the five-acre limit for a small mine and required that the operator submit information identifying the full extent of the mining operation within 60 days. Subsequently a Notice of Intention to Commence Small Mining Operations was submitted and approved together with a surety in the amount of \$18,600.00 for a five-acre operation. This approval was sent March 15, 2007.

9. Soils



I did not see any soil stockpiles.

12. Other

The operator is mining some unconsolidated alluvial sand and gravel, but as far as I could determine, it appeared the majority of the operation is in consolidated or partially consolidated rock that was not deposited by sedimentary processes. Photo 5 shows one type of deposit being mined. Near the surface, the rock is weathered and may not be fully consolidated, but it becomes more intact with depth.

There are some parts of the mine where the operator is extracting material meeting the definitions of sand and gravel in the rules. Extraction of this size and nature of material is exempt from regulation by the Division.

There is an area above the main part of the mine from which clay has been extracted (Photo 1).

I had intended to use a GPS to map the site but decided not to do this after seeing the size of the operation. It is clearly larger than five acres, but the actual size will depend on whether areas where sand and gravel are being mined are included within the permitted area.

The Division's GIS specialist, Dan Smith, estimated the size of the disturbed area using an aerial photo.

Conclusions and Recommendations:

The operator needs to salvage soil in all new disturbed areas.

The clay pit needs to be included as part of the disturbed area.

The report for an inspection conducted January 10, 2007, says:

... a significant portion of the site should now be considered a mining operation. Not only was bedded rock material exposed, it was being actively quarried, crushed and screened. Inspectors were told that most of this finished product was being used for the light rail commuter train project (ballast). A large pile of sub-grade material was on site. The inspectors were also shown an area (less than 1 acre) where the operator had been extracting clay for a local brick manufacturer (this would also require a permit).

The report also said the area may now have exceeded five acres and that a Notice of Intention to Commence Large Mining Operations may be warranted.

I agree with the conclusions of this report. Although the operator is mining some alluvial sand and gravel, the majority of the site has exposed highwalls which are clearly consolidated rock. At and near the surface, the rock is weathered to the point that it is not always fully consolidated, but this rock was not deposited by sedimentary process, does not meet the size criteria for gravel, and is not in a matrix of alluvial sand and gravel as would be required for rock aggregate.

The Division should send a letter giving the operator a deadline for submitting a Notice of Intention to Commence Large Mining Operations. All of the crushing and screening operations and the scale house need to be included in the disturbed area. It may be possible to exclude areas being mined strictly for sand and gravel.

The Division also needs to consider whether an interim bond is required, but this should be based on the size of the area where mining operations are occurring which is unknown at this time.

Inspector's Signature

Re B Ru

Date:

4/21/08

PBB:pb

cc: Kent Butters, CE Butters

Attachment: Photos

O:\M057-Weber\S0570004-Towers\draft\ins-04092008.doc



Photo 1. Clay pit—about one acre—to the north of the main part of the mine.



Photo 2. Overview of some of the crushing and screening operations.



Photo 3. A portion of the highwall and adjacent pad.



Photo 4. Near the center of the photo is a scale house on a different level than the pad. To the right of the scale house is a large pile of gravel and smaller-sized material.



Photo 5. The highwall. Note that it is nearly vertical.



Photo 6. Another view of the highwall. This is clearly not sand and gravel.



Photo 7. This shows an area from which the operator is mining sand.



Photo 8. Another view of the crushing and screening operations and the highwall.